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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/547,065	04/11/2000	Byron A. Alcorn	10981094-1	3670

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FORT COLLINS, CO 80527-2400

EXAMINER

NGUYEN, PHU K

ART UNIT PAPER NUMBER

2671

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PR4

# Office Action Summary

Application No.  
09/547,065

Applicant(s)  
ALCORN et al.

Examiner  
Phu K. Nguyen

Art Unit  
2671



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jul 18, 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-8, 10, 13, 14, and 18-41 is/are pending in the application.
- 4a) Of the above, claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8, 10, 13, 14, and 18-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some\* c) ☐ None of:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

*Phu K. Nguyen*  
PHU K. NGUYEN  
PRIMARY EXAMINER  
GROUP 2400

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-8, 10, 13, 14, and 18-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAUFMAN et al. (5,760,781).

As per claim 1, Kaufman teaches the claimed "graphics system comprising:

"A 2D imaging pipeline" (Kaufman, figure 12).

It is noted that Kaufman system receives the 3D objects and store them in 3D buffer 22.

However, these 3D data converted to 2D data to store in 2D buffers 73 and 24 suggests "a 2D image pipeline" as claimed. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to configure Kaufman's system as claimed. Applicant's arguments filed July 18, 2002 have been fully considered but they are not deemed to be persuasive. Applicant's claimed "2D image pipeline" has no clear structure except the function of "manipulate 2D images and composite separately generated 3D image." It is clear that Kaufman's voxel information stored in the 2D buffer is indeed a representation of "2D image" and the manipulation of this 2D images generates "a 3D image" as claimed. Accordingly, the claimed invention as represented in the claims does not represent a patentable distinction over the art of record.

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Claim 2 adds into claim 1 "pixel data" which Kaufman teaches in Pixel Processor 42 in which the voxel data contained in the 2D buffer is indeed "a pixel" data..

Claim 3-4 adds into claim 1 "a rendering pipeline" which Kaufman teaches in column 16, lines 44-62..

Claim 6-7 add into claim 1 "a frame buffer" which Kaufman teaches in Buffers 24 and 73.

Claims 8, 10, 13, 14, and 18-20, 36-41 add into claim 1 the details of system which Kaufman teaches in figure 14.

Due to the similarity of claims 21-35 to claims 1-4, 6-8, 10, 13, 14, and 18-20, 36-41, they are rejected under a similar reason. Accordingly, the claimed invention as represented in the claims does not represent a patentable distinction over the art of record.

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

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will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Conclusion***

4. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703)-308-9051 (**formal** communications intended for entry), Or:

(703)-305-9724 (**informal** communications labeled **PROPOSED** or **DRAFT**).


Hand-delivered responses should be brought to:

Sixth Floor Receptionist, Crystal Park II, 2121 Crystal Drive, Arlington, VA.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen, whose telephone number is (703)-305-9796 and can normally be reached Monday-Friday from 6:30 AM to 3 PM.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305-3900.

Phu K. Nguyen  
Patent Examiner  
Art Unit 2671

  
PHU K. NGUYEN  
PRIMARY EXAMINER  
GROUP 2671